

# Work Order ID 69109

Monday, May 02, 2011 11:07:40 AM



Ship May 13<sup>th</sup> Page 1

Item ID: D350-689-021

Accept



Setup Start



Revision ID:

Item Name: Dual High Back Seat, LH

Stop



Start Date: 5/2/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/13/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *MF*

Date: *11-05-02*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

DSI 9419

A

DSI 9498

A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-021

CHG002

*8 u/c 1.8*  
*003 PERECN 11-576*

110

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

*Per 5/12* *(1)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 69109**

Page 2

Monday, May 02, 2011 11:07:40 AM

Item ID: D350-689-021

Accept



Setup Start



Revision ID:

Stop



Item Name: Dual High Back Seat, LH

Start Date: 5/2/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/13/2011 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120



QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

Memo

0.00

Sent  
+ kit no. washing

130



Packaging

Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPP D350-689-021

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Sent 11/5/12

10/10/12 sent kit only

11/5/12

11/05/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Monday, May 02, 2011 11:07:37 AM

Page 1

**Parent Item:** D350-689-021

**Parent Item Name:** Dual High Back Seat, LH

**Start Date:** 5/2/2011**Required Date:** 5/13/2011

**Start Qty: 1.00**

**Required Qty: 1.00**

**Comments:** IPP Rev:A 08-12-23 new issue DD verified by: LL 08.12.24 IPP Rev:B  
chg002 DD 10.02.12 verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3018-1 Seat Cushion		Manufactured	No			110	Each	1.0000	1	1			
<div style="display: flex; justify-content: space-between;"> <div> <p><i>Ship Tues May 17 see attached email OK w/ customer</i></p> </div> <div> <p><u>Location</u></p> <p>ST420A</p> <p>65398</p> </div> <div> <p><u>Loc Qty</u></p> <p>1</p> <p>1</p> </div> <div> <p><u>Loc Code</u></p> </div> </div>													
6D3019-1 Seat Cushion		Manufactured	No			110	Each	1.0000	1	1			
<div style="display: flex; justify-content: space-between;"> <div></div> <div> <p><u>Location</u></p> <p>ST420A</p> <p>65399</p> </div> <div> <p><u>Loc Qty</u></p> <p>1</p> <p>1</p> </div> <div> <p><u>Loc Code</u></p> </div> </div>													
D350-689-023 Energy Attenuating Floor Provisions		Manufactured	No			110	Each	0.0000	1	1			
<div style="display: flex; justify-content: space-between;"> <div> <p><i>Ship 13/05</i></p> </div> <div></div> <div></div> <div></div> </div>													
D350-689-043 Dual High Back Seat Assembly		Manufactured	No			110	Each	0.0000	1	1			
<div style="display: flex; justify-content: space-between;"> <div></div> <div></div> <div></div> <div></div> </div>													

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A  
AND FLIGHT MANUAL SUPPLEMENT FMS-D350-689 REV. A  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 0  
REF. CANADIAN STC: SH02-33  
REF. FAA STC: SR01620NY

## PURPOSE

The purpose of this DSI is to add the D350-689-021 Dual High Back Seat Installation, LH, the D350-689-023 Floor Provisions Kit and the D350-689-043 Dual High Back Seat Assembly to IIN-D350-689 Rev. A. The D350-689-021/-023 Kits are compatible with the Energy Attenuating Seat rails in later AS 350/355 model aircraft.

The DSI 9419-011 Kit includes the parts that are required to convert a D350-689-011 installation into a D350-689-021 installation.

## REFERENCE ONLY

## PART LIST




-011	-021	-023	-043	P/N	DESCRIPTION
X				DSI 9419-011	ENERGY ATTENUATING CONVERSION KIT
	X			D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
	1	X		D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
	1		X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
			2	D3016-041	SEAT FRAME ASSEMBLY
			1	D3017-041	BACK FRAME ASSEMBLY
	1			D3018-1	SEAT CUSHION
	1			D3019-1	BACK CUSHION
			1	D3021-041	TUBE ASSEMBLY
			1	D3022-1	SEAT PAN
			1	D3023-1	BACK PANEL
			3	D3024-1	SPACER
		1		D3025-1	BEAM
		1		D3026-1	CHANNEL
		1		D3027-1	CLIP
		1		D3027-3	CLIP
		1		D3027-5	CLIP
		4		D3027-7	CLIP
			2	D3031-1	LOOP
1		1		D3234-1	DOUBLER
1		1		D3234-3	DOUBLER
2			2	D3808-041	SEAT RAIL ASSEMBLY
4			4	D3809-1	SLIDING BLOCK
1		1		D3811-041	SEAT TRACK ASSEMBLY

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008  
CERT. NO.: SH02-33  
ISSUE NO.: 1

A	NEW ISSUE	RF	08.08.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9419</b>	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		ENERGY ATTENUATING PROVISION KIT	NTS
DATE	08.08.19	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	





-011	-021	-023	-043	P/N	DESCRIPTION
			3	AN3-12A	BOLT
14		14		MS20426AD4-5	RIVET
34		34		MS20470AD4-5	RIVET
18		18		MS20470AD4-6	RIVET
		32		MS20470AD5-6	RIVET
			40	MS20600AD4W2	RIVET
			6	MS20600AD4W3	RIVET
9		9	23	MS21042L3	NUT (or MS21042-3)
			4	MS24693-S272	SCREW
8			8	MS24694-S3	SCREW
9		9		MS24694-S50	SCREW
4			4	MS24694-S148	SCREW
			4	MS27039-1-17	SCREW
			12	MS27039-1-19	SCREW
			23	NAS1149D0332J	WASHER (or AN960JD10L)
9		9		NAS1149D0363J	WASHER (or AN960JD10)

**REFERENCE ONLY**

### PROCEDURE

1. Install the under floor structure as outlined in steps 1-18 of IIN-D350-689 Rev. A and DSI 9311 Rev. A as applicable, except do not install D3032-1 Spacers. Attach D3026-1 Channel to floor using (14) MS20426AD4 rivets. Ensure D3234-1/-3 Doublers are installed per DSI 9269 Rev. A.
2. Position the D3811-041 Seat Track Assy at LBL 27.33 as shown in Figure 1 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.
3. Transfer the attachment holes from D3811-041 Seat Track Assy to aircraft floor (9 pls) using a  $\phi 0.201$  (#7 drill). Deburr holes. Install D3811-041 using (9) MS24694-S50 screws, (9) NAS1149D0363J washers, and (9) MS21042L3 nuts as shown in Figure 1. Torque screws to 20 to 25 in-lbs (2.3 to 2.8 Nm).
4. If converting a -041 Seat Assembly to a -043 Seat Assembly, remove D3028-1 Studs, D3029-1 Springs, and D3030-1 Locks from the D350-689-041 Seat Assembly. Install (2) D3808-041 Seat Rails Assemblies as shown in Figure 1 Detail A using (4) MS24694-S148 Screws. Torque screws to 100 to 140 in-lbs (11.3 to 15.8 Nm). Install D3809-1 Sliding Blocks using (2) MS24694-S3 screws as shown in Figure 1 Detail A. Torque screws to 12 to 15 in-lbs (1.4 to 1.7 Nm).
5. Remove screws from back end of Seat Tracks at LBL 27.33 and LBL 8.98. Slide D350-689-043 Seat Assembly into both seat tracks and lock in desired position using D3810-1 Retractable Spring Plungers. Re-install screws on back of seat tracks per the Aircraft Maintenance Manual.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY:   
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<del>RF</del>	DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9419</b>	SHEET 2 OF 5
APPROVED	<del>RF</del>	TITLE	SCALE
DE APPR.	<del>RF</del>	<b>ENERGY ATTENUATING PROVISION KIT</b>	NTS
DATE <b>08.08.19</b>		<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



**DART Helicopter Services, L.L.C.**

4650 North Avenue  
Oceanside, CA 92056  
USA  
Ph: 1-613-632-3336, Fax: 1-613-632-4443  
sales@darths.com

**Purchase Order**

Order #: 10187  
Prepared By: Nancy MacLeod  
Date Printed: 5/12/2011  
Time: 11:09:18 AM  
# of Items: 3  
Page: 1

**Purchased From:**  
DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
CANADA

**Ship To:**  
COAST TO COAST HELICOPTERS, INC (CCOAS03)  
C/O HELI-INTER  
ATT: C-FPHK  
6500 CHEMIN DE LA SAVANE  
ST-HUBERT, QC J3Y 8Y9 CANADA  
ATT: DENIS SAVOIE  
Tax ID#: 89-3766113-RT001 Tel #: 1 403 886 5995

PO Date: 4/29/2011 Cust Ref#: POCTC 107  
Need Date: 5/13/2011 Terms: NET 30  
Remarks: GOOD TO GO NM 29MAY11

Vendor #: CDART02 Customer: COAST TO COAST HELICOPTER  
Phone #: Fax #:  
Resale: YES Resale #:

Insure?: Ship Via: Purolator Ground Account: 3436217 DHLUCIE

**All items subject to our inspection and acceptance**

Item	Part Number/Description	Delivery	To Ship	CD	List Price	Disc%	Unit Price	Total Amt
1	D350-689-021 Dual High Back Seat Installation SO#: 8363	5/13/2011	1.00	FN	\$13,003.20	23.00%	\$10,012.46 EA	\$10,012.46
2	D350-689-017 Shoulder harness Kit, 4 point, Inertia Reel SO#: 8363	5/13/2011	1.00	FN	\$2,918.70	23.00%	\$2,247.40 EA	\$2,247.40
3	D350-689-023 Floor Provisions Kit SO#: 8363	5/13/2011	2.00	FN	\$2,975.40	23.00%	\$2,291.06 EA	\$4,582.12

Ship order as soon as possible.

Please include customer purchase order number on all documents, invoices and packages.

8130-3 required.

5/12/2011 - nm - \*\*\*\*\* PLEASE SHIP SEAT FRIDAY MAY 13TH AND CUSHIONS ON TUESDAY AS PER CUSTOMER'S REQUEST \*\*\*\*\*

\*\*\*\*\* TIME SENSITIVE TO THE CUSTOMER. SHIP MAY 13TH OR SOONER WOULD BE APPRECIATED \*\*\*\*\*

\*\*\*\*\* PLEASE SHIP ALL IN ONE BOX \*\*\*\*\*

*Ship w/o cushions*

Pricing listed above is as per contract agreement between DART Helicopter Services, LLC and the respective manufacturer.	Item Total:	\$16,841.98
Authorized Signature:	Charges:	\$0.00
	Total:	\$16,841.98
		US Dollars



# List Lots

Page 1 of 1

Wednesday, May 18, 2011 7:02:08 AM

Criteria : Item ID: 'D3018-1', 'D3019-1' All Locations All Warehouses All Quantity

Item ID	Warehouse ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Type Code	Comments
Item Name	Location ID				Lot Code		
D3018-1	Main Warehouse	68750	5/18/2011	3.0000	QC21		
Seat Cushion	ST420A						
Total:				3.0000			
D3019-1	Main Warehouse	68751	5/18/2011	3.0000	QC21		
Seat Cushion	ST420A						
Total:				3.0000			

